

R66-series Firewall Drain Installation Kit Instructions

Firewall drain routes collected moisture away from engine. KI-258-1 is for helicopters equipped with G727-1 engine breather tube; KI-258-2 is for helicopters equipped with A785-36 hose.

NOTE

Visit www.robinsonheli.com to verify kit instructions are current revision. Review instructions before installation; contact RHC Technical Support with questions. Verify kit contents match list; contact RHC Customer Service if parts are missing or damaged.

ITEM	PART NUMBER	KIT CONTENTS	QTY PER KI-258-1	QTY PER KI-258-2
1	KI-258Instr.	Kit Instructions	1	1
2	A456-1	Drain	1	1
3	A729-68	Tube (coupling)	0	2
4	A729-80	Tube (drain)	1	1
5	B277-12	Clamp	0	4
6	D277-8	Clamp	1	1
7	F170-2	Fitting (replaces F170-1 fitting)	0	1
8	G727-3	Tube (engine breather)	0	1
9	G809-1	Tab	1	0
10	MS21042L08	Nut	1	1
11	MS21919WCH12	Clamp	1	2
12	MS27039C0806	Screw	1	0
13	MS27039C0816	Screw	0	1
14	NAS617-12	Packing	0	1
15	NAS1149FN816P+	Washer (Note: "+" in part number indicates 20-qty pack)	1	0
16	NAS1149FN832P+	Washer (Note: "+" in part number indicates 20-qty pack)	0	1
17	NAS9301B-4-01	Rivet	2	2

Consumables

Refer to R66 Maintenance Manual (MM) § 20-70 for approved materials list.

- B270-1 Sealant

Special Tools

- Blind rivet installation tool
- Cobalt drill bits, sizes #11 and #30
- Reamer, 0.375 inch diameter
- Rotary file

Kit Instructions

1. Turn battery switch OFF. Remove engine cowling assembly per MM § 53-21. Cover engine to protect from drilling debris.
2. Refer to Figure 1, Detail A. Position A456-1 (tube) drain flush with forward edge of G929-1 cover and along lower edge as shown. With drain in position, trace rivet holes onto cover using a permanent marker. Remove drain and verify marked locations will provide minimum edge distance for installation of rivets. Adjust marked locations as required.
3. Drill (1) 0.127-0.133 inch diameter hole at forward rivet hole location. Deburr hole. Cleco drain in place. With second rivet hole mark aligned, use drain as template and drill second 0.127-0.133 inch diameter rivet hole. Remove drain and deburr hole.
4. Refer to Figure 1, Detail B. Locate center of drain hole as shown. Drill (1) 0.190 – 0.196 inch diameter pilot hole in marked center of hole. Enlarge hole to 0.375 inch diameter. Deburr hole. Install drain using (2) NAS9301B-4-01 rivets.
5. Refer to Figure 1, Detail C. Seal completely around A456-1 drain and seal corner relief holes in G929-1 cover using B270-1 sealant. Allow sealant to cure per manufacturers data, located on product label, or 3M® Aerospace technical datasheet (AC-350 Class B), available online.
6. Install A729-80 tube to drain tube and secure using D277-8 clamp. Remove protective covering from engine.
7. Refer to IPC Figure 71-19. If G727-1 tube and F170-2 fitting installed, proceed to step 8. If A785-36 hose is installed, perform the following:
 - a. Remove and discard A785-36 hose and F170-1 fitting.
 - b. Install NAS617-12 packing on new F170-2 fitting and install fitting in engine gearbox. Special torque fitting per MM § 20-33 and torque stripe per MM Figure 5-1.
 - c. Refer to Figure 2. Install (1) A729-68 tube to fitting and (1) tube to F169-9 exhaust weldment vent using (1) B277-12 clamp to secure each tube. Position B277-12 clamp screws to top within 30 degrees and tighten clamps.
 - d. Slide (1) B277-12 clamp on each tube. Install G727-3 tube weldment, position clamps and tighten to secure. Verify security.
 - e. Position MS21919WCH12 clamp over tube weldment and install using C130-51 spacer and hardware, securing clamp to engine vertical fireshield. Verify security.
 - f. Insert A729-80 tube (ref. Figure 1) thru tab on G727-3 tube weldment.
8. Refer to Figure 3. Slide G809-1 tab on A729-80 tube and position as shown. Position MS21919WCH12 clamp over G727-1 tube weldment 4.75 ± 0.25 inches from existing clamp. Install clamp to tab using (1) MS27039C0806 screw, (1) NAS1149FN816P washer, and (1) MS21042L08 nut; tighten to secure, ensuring A729-80 tube is positioned away from engine as shown (approximately 45° angle).

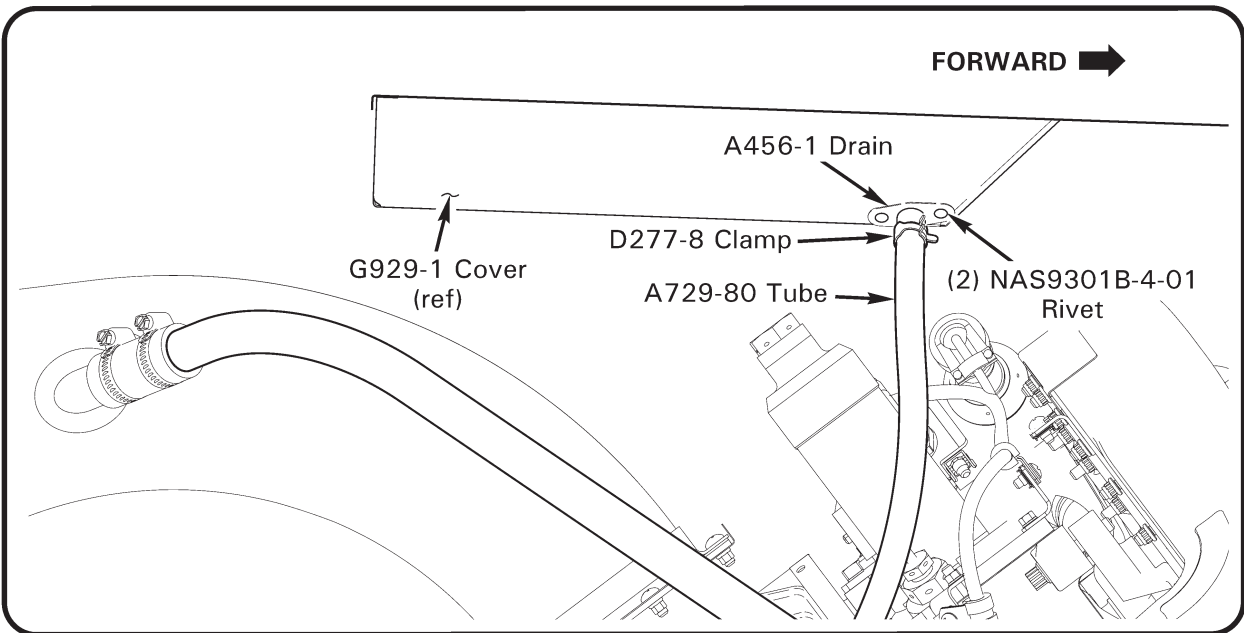
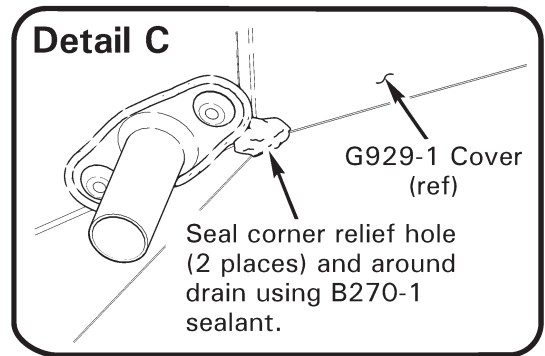
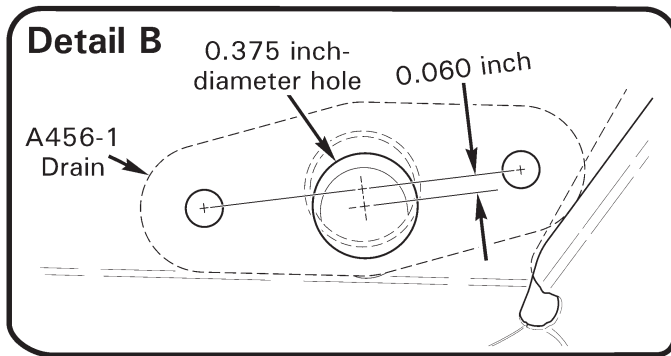
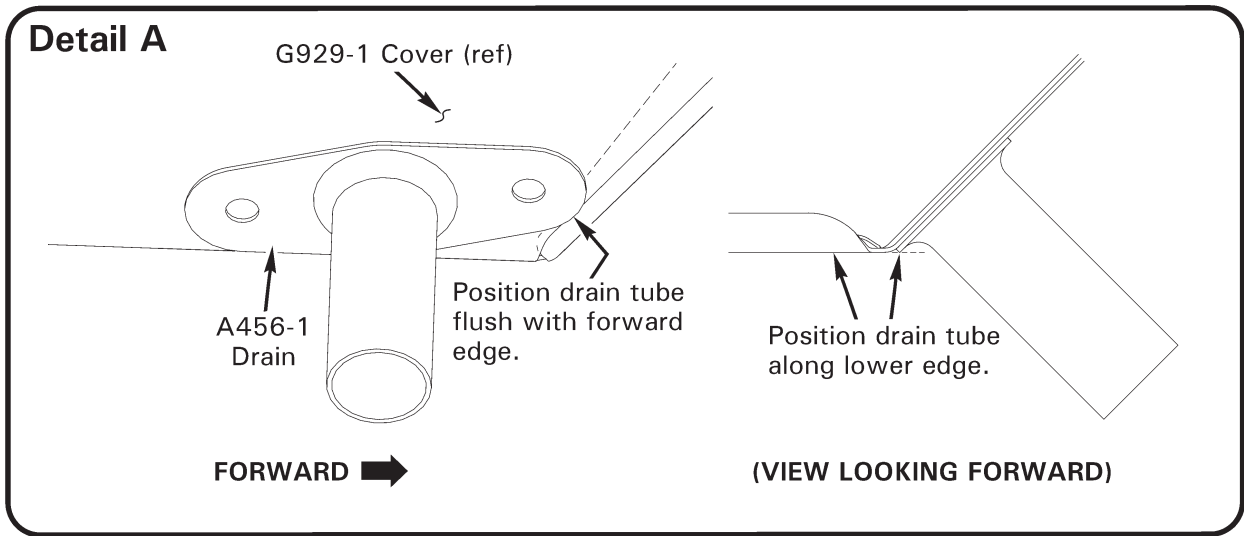


FIGURE 1 A456-1 drain tube installation

Kit Instructions (continued)

- 9. Check drain function and proper seal of relief holes on G929-1 cover by carefully pouring a small amount of water onto tray and inspecting for leaks.
- 10. Install engine cowling assembly per MM § 53-21.
- 11. Make appropriate maintenance record entries. Weight and Balance change is negligible.

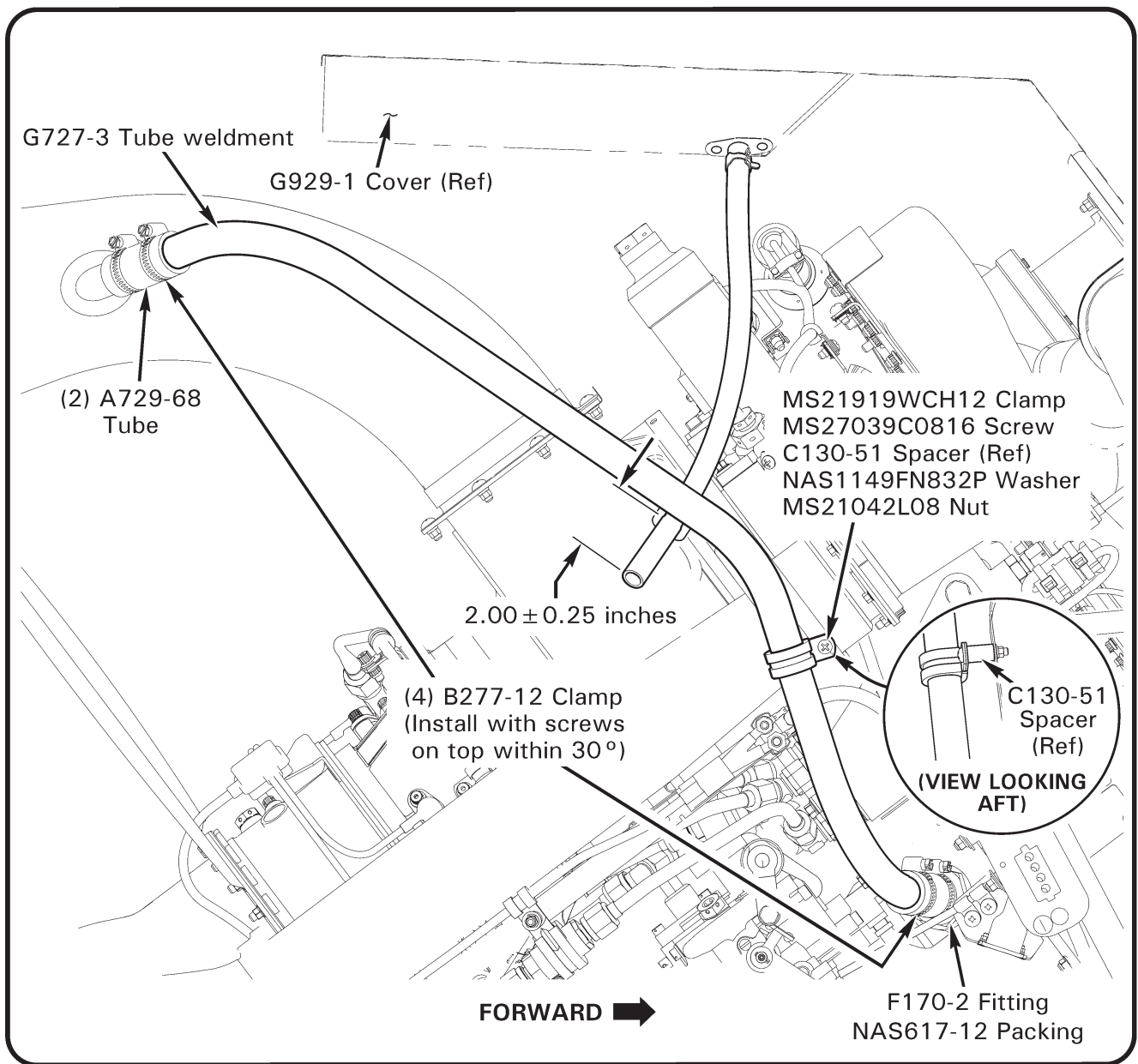


FIGURE 2 G727-3 Tube weldment installation

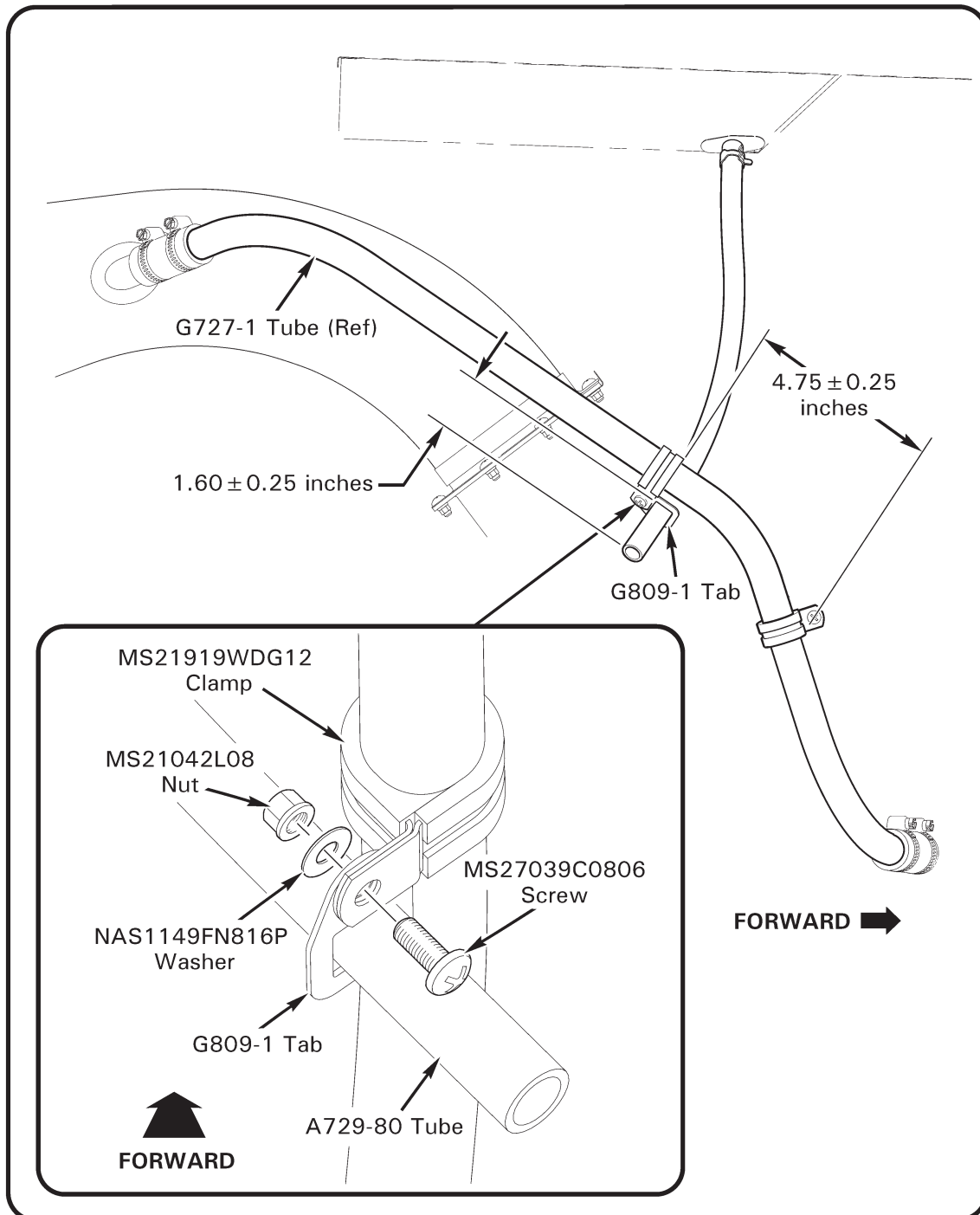


FIGURE 3 G727-1 tube with G809-1 tab installation
(same as Figure 2 except as shown)